

A Study of the Types of Structural
and Grammatical Errors Appearing in the
Writing of 170 Freshmen and 170 Juniors
and Seniors at the University of Kansas
and of 114 Boys of Superior Mental Abil-
ity at St. Louis Country Day School


by

Roberta LaBrant Green,
A. B., Baker University,
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A STUDY OF THE TYPES OF STRUCTURAL AND GRAMMATICAL
ERRORS APPEARING IN THE WRITING OF 170 FRESHMEN
AND 170 JUNIORS AND SENIORS AT THE UNIVERSITY OF
KANSAS AND OF 114 BOYS OF SUPERIOR MENTAL ABILITY
AT ST. LOUIS COUNTRY DAY SCHOOL

I. Statement of Problem

A study of the present day literature of curriculum construction reveals a general demand for change—a shifting of standards and of emphasis. No longer are personal judgments and group opinion generally accepted as a reliable basis for selection of materials or formulation of methods of instruction.

The demand that these be determined objectively is being met to some degree by those persons doing research in certain subjects in the grades. The content of many arithmetic texts now in use is based upon those arithmetic processes actually used by the average adult. Spelling lists contain the words most commonly used or those most frequently misspelled. Hand-writing scales, determined by the grades of writing pupils of different age levels actually acquire, are used as measures of writing ability.

Scientific method is being employed by many who are engaged in the reconstruction of the English curriculum, but not until the last three or four years has it been used to any great extent. In 1925, Essie Chamberlain, retiring president of the National Council of Teachers of English, speaking of objective educational studies made the statement that "English has offered¹ fewer contributors than have many other subjects". In agreement

¹ Chamberlain, Essie, "Curriculum Building in English," English Journal, January, 1925.

with this statement is the assertion of Doctor Hosic (1924) that "the English curriculum of the high school lacks the sanction of scientific investigation".

During the past few years, however, considerable progress has been made in determining objectively what the English course of study should contain. The entire minimum essentials movement is an important part of the general tendency to use scientific methods in curriculum construction. Standardized tests in composition are all based upon studies of what constructions and usages students actually employ, in an attempt to determine what elements of written composition shall be required of pupils in the various grades.

Many data obtained by standardized tests which reveal errors in English usage are available for unselected groups of elementary and high school pupils, but few analyses have been made to discover types of errors made by pupils of superior mental ability. Likewise, except for those studies forming the bases for standardized tests in composition, few have been reported which are concerned with the habitual writing tendencies of either unselected or superior groups. Therefore any study that purposes to discover usages employed or types of errors made by the student of superior ability should be of interest to those attempting to adapt the English curriculum to the needs of the superior student.

The purpose of this study is (a) to determine the relative frequency of certain types of grammatical and structural errors made in the free writing of high school students of superior mental ability, of unselected university freshmen, and of unselected university juniors and seniors; (b) to make comparisons between the frequencies and types of errors made by high school students of superior mental ability, by unselected university freshmen, and by unselected university juniors and seniors; and (c) to evaluate certain standardized tests in English composition as a means for diagnosing writing difficulties of high school students of superior mental ability.

II. Source of Data

The data used in this study were secured from two sources:

A. In the second semester, 1926, written composition was secured from 170 college freshmen and 170 upperclassmen in the University of Kansas. Most of the freshmen had completed one semester's work in freshman (college) rhetoric, and hence presumably wrote with a degree of correctness at least slightly greater than that of high school graduates. The upper classmen were enrolled in courses in education. These courses, required by the state for certificates permitting teaching in high schools, are open to students in the College of Liberal Arts and the School of Education. No attempt was made to determine whether the advanced students had taken work in composition above the freshman required courses. It is probable that in the group there were some who had elected majors and minors in English. The advanced group represented as nearly as possible a cross-section of those in the university who were planning to teach after graduation.

The students were asked to write for twenty-five minutes on the topic: "The Best Teacher I Ever Had". The discussions, they were told, were to be used in a study to determine desirable traits of teachers. It was felt that university students would be interested in the subject given and consequently would write

with some degree of enthusiasm and spontaneity. The discussion almost invariably included elements both of exposition and of description; in many cases narration also was employed. It is therefore apparent that the writers were free to use all types of sentences. Directions put no emphasis upon skill in writing, but stressed the importance of analysis of teaching-ability. The themes, therefore, probably represent the habitual writing tendencies of the students.

(B) In November, 1927, certain data were secured from students in grades 7 to 12 inclusive in Country Day School, St. Louis, Missouri. This is a private school for boys. The students were first given the Otis Self-Administering Test, Higher Examination, Form A. This is a group test for measuring mental ability of pupils from twelve to eighteen years of age. (See Appendix.) The twenty-minute period was used. This test gives for high school pupils nothing better than an approximation of absolute mental ability, since I. Q. technique is relatively invalid for children older than thirteen or fourteen, and since there may be a question as to the validity of the test for students of superior ability. However, the relative positions of pupils upon this test are probably fairly reliable. Those earning intelligence quotients of 110 or above obviously have mental ability considerably above average.

In addition to the Otis test, Form A of Pressey Diagnostic

Tests in English Composition, parts C (grammar) and D (sentence structure) were given. The purpose of these tests is to discover the student's ability to detect grammatical and structural errors in relatively simple sentences. The tests are designed for use in grades 6 to 12 inclusive.

At the same time that the standardized tests were given, students were asked to write for twenty-five minutes on the topic: "An Interesting Book I Have Discovered". These themes, as well as those written by the university students, contained exposition, description, and narration. Directions again stressed importance of subject matter. It is probable that these themes reveal the student's habitual writing tendencies to the same extent as do those written by the university freshmen and upper-classmen.

III. Method of Procedure

Three main groups of students were used in this study. The unselected university freshmen and upperclassmen comprised two of these. A third group was selected from the Country Day School pupils. The basis of selection was intelligence quotients as indicated by scores on the Otis test. Of the Country Day School pupils, only those were used in this study whose intelligence quotients as indicated by the above test were 110 or higher. These numbered 114.

Since there may be a question about the validity and the adequacy of the Otis test for measuring the ability of students of superior mental ability, it is possible that some of the superior students were not discovered by the test. Moreover, it is very probable that all of the intelligence quotients determined by the Otis test are too low. Never-the-less, the basis of selection may be considered a fairly valid one for eliminating those whose intelligence is average or inferior.

The university students were divided according to classification, freshmen being placed in one group, and juniors and seniors in another. Those pupils in the selected group from the Country Day School were sub-divided into two groups: those of intelligence quotients 110 to 122 (numbering 58) and those of intelligence quotients 123 to 137 (numbering 56).

Compositions from all students were analyzed to discover frequencies and types of structural and grammatical errors

appearing in the compositions of the three groups. No attention was given to quality of thought, organization, style, vocabulary, or spelling. Analysis of errors was based on the classification found in the Pressey Diagnostic Tests in Grammar and Sentence Structure, with certain additions from the Wisconsin Tests of Grammatical Correctness. A list of the types of errors, with items grouped according to similarity, is presented in Table 1.

Table 1

Classification of errors used in analysis of themes written by 114 students in St. Louis Country Day School, and by 170 freshmen and 170 upperclassmen in University of Kansas.

1. Dependent elements used independently
2. Faulty connectives
3. Dangling modifiers
4. Misplaced modifiers
5. Omission of pronouns or prepositions
6. Obscure reference of pronouns
7. Wrong case of pronouns
8. Lack of agreement of pronouns with antecedents
9. Lack of agreement of verbs with subjects
10. Incorrect tense forms
11. Use of "would" for simple past tense forms
12. Incorrect sequence of tenses
13. Use of adjectives for adverbs
14. Confusion of forms from similarity of sound or meaning
15. Use of double negatives
16. Unclassified errors

The items are self-explanatory with the possible exception of numbers 5, 14, and 16. Omission of pronoun or preposition was

found in such expressions as: "This boy was here I gave it to", or "This is the man whom I gave the money". Confusion of forms from similarity of sound or meaning covers confusion of such words as "to", "too", "two", "know" and "no", "lie" and "lay", and "learn" and "teach". The unclassified errors include faulty comparisons, such expressions as "of twenty years of age", use of active for passive voice, change of tense, and use of "very" as a modifier of the verb.

Errors made by Country Day School pupils on the Pressey tests in grammar and sentence structure were tabulated according to the same classification as was used in the analysis of themes. It is to be noted, however, that the Pressey tests do not make provision for testing items no. 11 (use of "would" for simple past tense), no. 12 (incorrect sequence of tenses), no. 15 (double negative) or no. 16 (errors included above in the list of unclassified errors).

IV. Presentation and Interpretation of Data

Classification of errors in written composition made by 114 boys of intelligence quotient 110 to 137 in grades 9, 10, 11, and 12, at St. Louis Country Day School is presented in Table 2. Errors most frequently made by these students are number 2, faulty connectives (21.25%); number 6, obscure reference of pronouns (20.10%); and number 4, misplaced modifiers (9.54%). Faulty connectives and obscure reference of pronouns comprise 41.25% of the errors made. Three types of errors rarely appear in the writing of these students: number 15, double negatives (.21%); number 7, wrong case of pronouns (.43%); and number 13, use of adjectives for adverbs (.65%). The unclassified errors amount to 11.71% of the total number made.

Table 2

Classification of errors in written composition made by 114 boys of I. Q. 110-137 in grades 9, 10, 11, and 12, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	21	4.55	7
2. Faulty connectives	98	21.25	1
3. Dangling modifiers	20	4.33	8
4. Misplaced modifiers	44	9.54	4
5. Omission of pronouns or preps.	6	1.30	13
6. Obscure reference of pronouns	93	20.10	2
7. Wrong case of pronouns	2	.43	15
8. Lack of agreement of pronouns with antecedents	16	3.47	9.5
9. Lack of agreement of verbs with subjects	14	3.03	11.5
10. Incorrect tense forms	16	3.47	9.5
11. Use of "would" for simple past tense forms	14	3.03	11.5
12. Incorrect sequence of tenses	24	5.20	6
13. Use of adjectives for adverbs	3	.65	14
14. Confusion of forms from similarity of sound or meaning	35	7.6	5
15. Double negatives	1	.21	16
16. Unclassified	54	11.71	3
Totals	461	99.87	

Table 3

Classification of errors in written composition made by 30 boys of I. Q. 110-137 in grade 9, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	4	2.75	10.5
2. Faulty connectives	47	32.41	1
3. Dangling modifiers	12	8.27	5
4. Misplaced modifiers	10	6.89	6
5. Omission of pronouns or prepositions	2	1.37	12.5
6. Obscure reference of pronouns	18	12.41	2
7. Wrong case of pronouns	0	0	15
8. Lack of agreement of pronouns with antecedents	5	3.44	8.5
9. Lack of agreement of verbs with subjects	4	2.75	10.5
10. Incorrect tense forms	5	3.44	8.5
11. Use of "would" for simple past tense forms	2	1.37	12.5
12. Incorrect sequence of tenses	3	5.51	7
13. Use of adjectives for adverbs	0	0	15
14. Confusion of forms from similarity of sound or meaning	15	10.34	3
15. Double negatives	0	0	15
16. Unclassified errors	13	8.96	4
Totals	145	99.71	

The results of the analysis of the compositions of the 30 boys of I. Q. 110-137 in grade 9 at St. Louis Country Day School appear in Table 3. Items number 2, faulty connectives (32.41%); number 6, obscure reference of pronouns (12.41%); and number 14, confusion of forms from similarity of sound or meaning (10.34%) appear most frequently in the writing of these students. Faulty connectives and obscure reference of pronouns cover a large percentage (44.82%) of all the errors made. Wrong case of pronouns (number 7), use of adjectives for adverbs (number 13), and double negatives (number 15) do not appear in the written work of these high school freshmen. Items number 11, use of "would" for simple past tense forms (1.37%), and number 5, omission of pronouns or prepositions (1.37%) appear rarely. Unclassified errors amount to 8.96% of all those made.

Tables 4 and 5 present the classification of errors in written composition made by 14 students of I. Q. 110-122, and by 16 students of I. Q. 123-137 in grade 9 at St. Louis Country Day School. Students in group one (I.Q. 110-122) make 55.79% of their errors in the use of connectives, while only 26.0% of the errors made by group two (I. Q. 123-137) lie within this classification. Item number 14 (confusion of forms from similarity of sound or meaning) comprises 8.42% of the errors made by group one, and 14.0% of those made by group two. Unclassified errors amount to 12.0% of those made by group two, and only 7.3% of those made by group one.

Table 4

Classification of errors in written composition made by 14 boys of I. Q. 110-122 in grade 9 at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	4	4.21	8
2. Faulty connectives	34	35.79	1
3. Dangling modifiers	8	8.42	3.5
4. Misplaced modifiers	6	6.31	6.5
5. Omission of pronouns or prepositions	1	1.05	12.5
6. Obscure reference of pronouns	12	12.63	2
7. Wrong case of pronouns	0	0	15
8. Lack of agreement of pronouns with antecedents	3	3.15	9.5
9. Lack of agreement of verbs with subjects	2	2.10	11
10. Incorrect tense forms	3	3.15	9.5
11. Use of "would" for simple past tense forms	1	1.05	12.5
12. Incorrect sequence of tenses	6	6.31	6.5
13. Use of adjectives for adverbs	0	0	15
14. Confusion of forms from similarity of sound or meaning	8	8.42	3.5
15. Double negatives	0	0	15
16. Unclassified errors	7	7.37	5
Totals	95	99.96	

Table 5

Classification of errors in written composition made by 16 boys of I. Q. 123-137, in grade 9, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	0	0	14.5
2. Faulty connectives	13	26.	1
3. Dangling modifiers	4	8	5.5
4. Misplaced modifiers	4	8	5.5
5. Omission of pronouns or preps.	1	2	11.5
6. Obscure reference of pronouns	6	12	3.5
7. Wrong case of pronouns	0	0	14.5
8. Lack of agreement of pronouns with antecedents	2	4	8.5
9. Lack of agreement of verbs with subjects	2	4	8.5
10. Incorrect tense forms	2	4	8.5
11. Use of "would" for simple past tense forms	1	2	11.5
12. Incorrect sequence of tenses	2	4	8.5
13. Use of adjectives for adverbs	0	0	14.5
14. Confusion of forms from similarity of sound or meaning	7	14	2
15. Double negatives	0	0	14.5
16. Unclassified errors	6	12	3.5
Totals	50	100	

Errors in the written composition of 35 boys of I. Q.

110-137 in grade 10 at St. Louis Country Day School are classified in Table 6. Mistakes most frequently appearing are number 6, obscure reference of pronouns (22.75%); number 2, faulty connectives (20.0%); number 1, dependent elements used independently (10.34%); and number 4, misplaced modifiers (10.34%). Over 42 per cent of the errors made are in use of connectives and reference of pronouns. Wrong case of pronouns (0.69%), use of adjectives for adverbs (1.37%), lack of agreement of verbs with subjects (1.37%), and omission of pronoun or preposition (1.37%) appear rarely. Unclassified errors amount to 10.34 % of all those made.

Tables 7 and 8 show the results of the analysis of the themes of 13 students of I. Q. 110-122 and of 22 students of I. Q. 123-137 in grade 10 at Country Day School, St. Louis. Students of I. Q. 110-122 make 15.62% of their errors in the use of connectives, while 23.45% of the errors made by those of I. Q. 123-137 fall into this category.

Table 6

Classification of errors in written composition made by 35 boys of I. Q. 110-137 in grade 10, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	15	10.34	4
2. Faulty connectives	29	20.	2
3. Dangling modifiers	6	4.13	7.5
4. Misplaced modifiers	15	10.34	4
5. Omission of pronouns or prepositions	2	1.37	13
6. Obscure reference of pronouns	33	22.75	1
7. Wrong case of pronouns	1	.69	15
8. Lack of agreement of pronouns with antecedents	6	4.13	7.5
9. Lack of agreement of verbs with subjects	2	1.37	13
10. Incorrect tense forms	3	2.07	11
11. Use of "would" for simple past tense forms	4	2.75	10
12. Incorrect sequence of tenses	5	3.44	9
13. Use of adjectives for adverbs	2	1.37	13
14. Confusion of forms from similarity of sound or meaning	7	4.82	6
15. Double negatives	0	0	16
16. Unclassified errors	15	10.34	4
Totals	145	99.91	

Table 7

Classification of errors in written composition made by 13 boys of I. Q. 110-122 in grade 10 at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	7	10.93	4
2. Faulty connectives	10	15.62	2
3. Dangling modifiers	1	1.56	12.5
4. Misplaced modifiers	9	14.12	3.0
5. Omission of pronouns or prepositions	1	1.56	12.5
6. Obscure reference of pronouns	14	21.87	1
7. Wrong case of pronouns	0	0	15.5
8. Lack of agreement of pronouns with antecedents	3	4.68	7
9. Lack of agreement of verbs with subjects	2	3.12	9
10. Incorrect tense forms	1	1.56	12.5
11. Use of "would" for simple past tense forms	2	3.12	9
12. Incorrect sequence of tenses	2	3.12	9
13. Use of adjectives for adverbs	1	1.56	12.5
14. Confusion of forms from similarity of sound or meaning	5	7.81	6
15. Double negatives	0	0	15.5
16. Unclassified errors	6	9.36	5
Totals	64	99.99	

Table 8

Classification of errors in written composition made by 22 boys of I. Q. 123-137 in grade 10 at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	8	9.87	4
2. Faulty connectives	19	23.45	1.5
3. Dangling modifiers	5	6.17	6
4. Misplaced modifiers	6	7.40	5
5. Omission of pronouns or prepositions	1	1.23	13
6. Obscure reference of pronouns	19	23.45	1.5
7. Wrong case of pronouns	1	1.23	13
8. Lack of agreement of pronouns with antecedents	3	3.70	7.5
9. Lack of agreement of verbs with subjects	0	0	15.5
10. Incorrect tense forms	2	2.46	10
11. Use of "would" for simple past tense forms	2	2.46	10
12. Incorrect sequence of tenses	3	3.70	7.5
13. Use of adjectives for adverbs	1	1.23	13
14. Confusion of forms from similarity of sound or meaning	2	2.46	10
15. Double negatives	0	0	15.5
16. Unclassified errors	9	11.11	3
Totals	81	99.92	

Table 9 presents the classification of errors in themes made by 25 boys of I. Q. 110-137 in grade 11 at St. Louis Country Day School. Most commonly appearing errors are number 6, obscure reference of pronouns (25%) and number 2, faulty connectives (14.58%). These two items cover 39.58% of errors made. No errors were made in items number 5 (omission of pronoun or preposition), number 13 (use of adjective for adverb), and number 15 (double negative). Number 7 (wrong case of pronoun) appears only once (1.04%). Unclassified errors include 14.58% of all those made.

Considerable difference in percentages of errors of each type made by the two groups of Country Day Students in grade 11 (those of I. Q. 110-122 and of I. Q. 123-137) is revealed by Tables 10 and 11. Pupils in the first group make only 12.82% of their errors in the use of connectives, while those in the second group make 22.22% of their errors in this manner. No errors on item number 14 (confusion of forms from similarity of sound or meaning) are made by group two, while students in group one make 7.69% of their errors in this way. Unclassified errors comprise 12.82% of those made by group one, and 22.22% of those made by group two.

Table 9

Classification of errors in written composition made by 25 boys of I. Q. 110-137 in grade 11, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	2	2.08	11.5
2. Faulty connectives	14	14.58	2.5
3. Dangling modifiers	2	2.08	11.5
4. Misplaced modifiers	9	9.37	4
5. Omission of pronouns or prepositions	0	0	15
6. Obscure reference of pronouns	24	25	1
7. Wrong case of pronouns	1	1.04	13
8. Lack of agreement of pronouns with antecedents	4	4.16	8
9. Lack of agreement of verbs with subjects	3	3.12	9.5
10. Incorrect tense forms	3	3.12	9.5
11. Use of "would" for simple past tense forms	5	5.20	7
12. Incorrect sequence of tenses	8	8.33	5
13. Use of adjectives for adverbs	0	0	15
14. Confusion of forms from similarity of sound or meaning	7	7.29	6
15. Double negatives	0	0	15
16. Unclassified errors	14	14.58	2.5
Totals	98	99.95	

Table 10

Classification of errors in written composition made by 14 boys of I. Q. 110-122 in grade 11 at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	2	2.56	11
2. Faulty connectives	10	12.82	2.5
3. Dangling modifiers	1	1.28	12.5
4. Misplaced modifiers	7	8.97	4.5
5. Omission of pronouns or prepositions	0	0	15
6. Obscure reference of pronouns	19	24.36	1
7. Wrong case of pronouns	1	1.28	12.5
8. Lack of agreement of pronouns with antecedents	4	5.12	8
9. Lack of agreement of verbs with subjects	3	3.84	9.5
10. Incorrect tense forms	3	3.84	9.5
11. Use of "would" for simple past tense forms	5	6.41	7
12. Incorrect sequence of tenses	7	8.97	4.5
13. Use of adjectives for adverbs	0	0	15
14. Confusion of forms from similarity of sound or meaning	6	7.69	6
15. Double negatives	0	0	15
16. Unclassified errors	10	12.82	2.5
Totals	78	99.96	

Table 11

Classification of errors in written composition made by 11 boys of I. Q. 123-137, in grade 11, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	0	0	12
2. Faulty connectives	4	22.22	2.5
3. Dangling modifiers	1	5.55	6
4. Misplaced modifiers	2	11.11	4
5. Omission of pronouns or prepositions	0	0	12
6. Obscure reference of pronouns	5	27.77	1
7. Wrong case of pronouns	0	0	12
8. Lack of agreement of pronouns with antecedents	0	0	12
9. Lack of agreement of verbs with subjects	0	0	12
10. Incorrect tense forms	0	0	12
Use of "would" for simple			
11. past tense forms	0	0	12
12. Incorrect sequence of tenses	1	5.55	6
13. Use of adjectives for adverbs	0	0	12
14. Confusion of forms from similarity of sound or meaning	1	5.55	6
15. Double negatives	0	0	12
16. Unclassified errors	4	22.22	2.5
Totals	18	99.97	

Table 12, presenting classification of errors in writing made by the 24 boys of I. Q. 110-137, grade 12, at St. Louis Country Day School, shows that for these students the most frequent errors are number 6, obscure reference of pronouns (24%); number 4, misplaced modifiers (13.33%); and number 2, faulty connectives (10.66%). Approximately 35% of the errors made are in use of connectives and reference of pronouns. Dependent elements used independently (number 1), dangling modifiers (number 3), and wrong case of pronouns (number 7) do not appear, while use of adjective for adverb (number 13) and double negative (number 15) appear but once each. Sixteen per cent (16%) of the errors made are unclassified.

From Tables 13 and 14, which show classification of errors made by the two groups of Country Day School students in grade 12, it is evident that certain items present greater difficulty for group one (I. Q. 110-122) than for group two (I. Q. 123-137). Students in the first group make 29.3% of their errors in reference of pronouns; those in the second group, only 9.52%. Misplaced modifiers comprise 13.63% of the errors made by group one, and but 4.75% of those made by group two. Five items, number 1 (dependent elements used independently), number 3 (dangling modifiers), number 7 (wrong case of pronouns), number 8 (lack of agreement of pronouns with antecedents), and number 11 (use of "would" for simple past tense forms) do not appear in the writing of either group.

Table 12

Classification of errors in written composition made by 24 boys of I. Q. 110-137 in grade 12, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	0	0	15
2. Faulty connectives	8	10.66	4
3. Dangling modifiers	0	0	15
4. Misplaced modifiers	10	13.33	3
5. Omission of pronouns or prepositions	2	2.66	10
6. Obscure reference of pronouns	18	24	1
7. Wrong case of pronouns	0	0	15
8. Lack of agreement of pronouns with antecedents	1	1.33	12
9. Lack of agreement of verbs with subjects	5	6.66	6.5
10. Incorrect tense forms	5	6.66	6.5
11. Use of "would" for simple past tense forms	3	4	8.5
12. Incorrect sequence of tenses	3	4	8.5
13. Use of adjectives for adverbs	1	1.33	12
14. Confusion of forms from similarity of sound or meaning	6	8	5
15. Double negatives	1	1.33	12
16. Unclassified errors	12	16.	2
Totals	75	99.98	

Table 13

Classification of errors in written composition made by 17 boys of I. Q. 110-122 in grade 12, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	0	0	14
2. Faulty connectives	6	11.11	4
3. Dangling modifiers	0	0	14
4. Misplaced modifiers	9	16.66	2.5
5. Omission of pronouns or modifiers	1	1.85	9.5
6. Obscure reference of pronouns	16	29.63	1
7. Wrong case of pronouns	0	0	14
8. Lack of agreement of pronouns with antecedents	0	0	14
9. Lack of agreement of verbs with subjects	3	5.55	6.5
10. Incorrect tense forms	3	5.55	6.5
11. Use of "would" for simple past tense forms	0	0	14
12. Incorrect sequence of tenses	1	1.85	9.5
13. Use of adjectives for adverbs	1	1.85	9.5
14. Confusion of forms from similarity of sound or meaning	4	7.40	5
15. Double negatives	1	1.85	9.5
16. Unclassified	9	16.66	2.5
Totals	54	99.96	

Table 14

Classification of errors in written composition made by 7 boys of I. Q. 123-137 in grade 12, at St. Louis Country Day School, November, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	0	0	14
2. Faulty connectives	2	9.52	5.5
3. Dangling modifiers	0	0	14
4. Misplaced modifiers	1	4.76	10
5. Omission of pronouns or prepositions	1	4.76	10
6. Obscure reference of pronouns	2	9.52	5.5
7. Wrong case of pronouns	0	0	14
8. Lack of agreement of pronouns with antecedents	1	4.76	10
9. Lack of agreement of verbs with subjects	2	9.52	5.5
10. Incorrect tense forms	2	9.52	5.5
11. Use of "would" for simple past tense forms	3	14.28	1.5
12. Incorrect sequence of tenses	2	9.52	5.5
13. Use of adjectives for adverbs	0	0	14
14. Confusion of forms from similarity of sound or meaning	2	9.52	5.5
15. Double negatives	0	0	14
16. Unclassified errors	3	14.28	1.5
Totals	21	99.96	

Classification of errors in written composition made by 170 University of Kansas freshmen is presented in Table 15. Errors most frequently appearing are number 2, faulty connectives (17.92%); number 11, use of "would" for simple past tense forms (12.48%); and number 14, confusion of forms from similarity of sound or meaning (10.89%). Errors rarely appearing are number 5, omission of pronouns or prepositions (1.47%); number 7, wrong case of pronouns (1.38%); number 9, lack of agreement of verbs with subjects (1.7%); and number 15, double negatives (0.22%). Only 4.88% of the errors made fall within the category, "unclassified".

Table 15

Classification of errors in written composition made by 170 unselected freshmen at the University of Kansas, February, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	53	6.01	7
2. Faulty connectives	158	17.92	1
3. Dangling modifiers	39	4.42	9
4. Misplaced modifiers	74	8.39	5
5. Omission of pronouns or preps.	13	1.47	14
6. Obscure reference of pronouns	127	14.41	2
7. Wrong case of pronouns	12	1.36	15
8. Lack of agreement of pronouns with antecedents	64	7.26	6
9. Lack of agreement of verbs with subjects	15	1.70	12.5
10. Incorrect tense forms	31	3.51	10
11. Use of "would" for simple past tense forms	110	12.44	3
12. Incorrect sequence of tenses	29	3.29	11
13. Use of adjectives for adverbs	15	1.70	12.5
14. Confusion of forms from similarity of sound or meaning	96	10.89	4
15. Double negatives	2	0.22	16
16. Unclassified errors	43	4.88	8
Totals	881	99.91	

Table 16 shows the results of the analysis of themes written by 170 juniors and seniors at the University of Kansas. The most frequent types of errors are number 2, faulty connectives (26.24%); number 6, obscure reference of pronouns (13.79%); number 11, use of "would" for simple past tense (10.79%); and number 9, misplaced modifiers (9.64%). Certain items occur infrequently: number 5, omission of pronouns or prepositions (0.20%); number 13, use of adjectives for adverbs (1.86%); and number 15, double negatives (0.2%). Unclassified errors comprise 4.66% of those made.

Table 16

Classification of errors in written composition made by 170 unselected juniors and seniors at the University of Kansas, February, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	49	5.08	7
2. Faulty connectives	253	26.24	1
3. Dangling modifiers	35	3.63	9
4. Misplaced modifiers	93	9.64	4
5. Omission of pronouns or prepositions	2	.20	15.5
6. Obscure reference of pronouns	135	13.79	2
7. Wrong case of pronouns	13	1.34	14
8. Lack of agreement of pronouns with antecedents	76	7.88	5
9. Lack of agreement of verbs with subjects	30	3.11	10
10. Incorrect tense forms	23	2.39	12
11. Use of "would" for simple past tense forms	104	10.79	3
12. Incorrect sequence of tenses	27	2.80	11
13. Use of adjectives for adverbs	18	1.86	13
14. Confusion of forms from similarity of sound or meaning	61	6.32	6
15. Double negatives	2	.20	15.5
16. Unclassified errors	45	4.66	8
Totals	964	99.93	

Division of university students into groups according to academic classification reveals little difference in either types or numbers of errors made. Classification of errors made by the 340 university students (170 freshmen and 170 upper-classmen) is presented in Table 17. Types of errors appearing most frequently are number 2, faulty connectives (22.27%); number 6, obscure reference of pronouns (14.09%); number 11, use of "would" for simple past tense forms (11.59%); and number 4, misplaced modifiers (9.04%). Number 15, double negatives, (0.21%); number 5, omission of pronouns or prepositions (0.81%); number 7, wrong case of pronouns (1.35%); and number 13, use of adjectives for adverbs (1.79%) appear rarely. Unclassified errors comprise 4.22% of those made.

Table 17

Classification of errors in written composition made by 170 unselected freshmen and 170 unselected juniors and seniors at the University of Kansas, February, 1927.

Type of error	Frequency	Percentage	Rank
1. Dependent elements used independently	102	5.52	7
2. Faulty connectives	411	22.27	1
3. Dangling modifiers	74	4.01	9
4. Misplaced modifiers	157	9.04	4
5. Omission of pronouns or prepositions	15	.81	15
6. Obscure reference of pronouns	260	14.09	2
7. Wrong case of pronouns	25	1.35	14
8. Lack of agreement of pronouns with antecedents	140	7.59	6
9. Lack of agreement of verbs with subjects	45	2.43	12
10. Incorrect tense forms	54	2.92	11
11. Use of "would" for simple past tense forms	214	11.59	3
12. Incorrect sequence of tenses	56	3.03	10
13. Use of adjectives for adverbs	33	1.79	13
14. Confusion of forms from similarity of sound or meaning	157	8.50	5
15. Double negatives	4	.21	16
16. Unclassified errors	88	4.22	8
Totals	1845	99.37	

Tables 18 and 19 present the numbers and percentages of errors on the various items of the Pressey Diagnostic Tests in Grammar and Sentence Structure, Form A, made by ninth, tenth, eleventh and twelfth grade students (grouped according to intelligence quotients) in Country Day School. From the facts here presented it is evident that students of intelligence quotient 122-137 make practically the same percentages of errors in each type as do those of intelligence quotient 112-122.

Table 13

Frequency of errors on various items of Pressey Diagnostic Tests in Grammar and Sentence Structure (Form A), made by ninth, tenth, eleventh, and twelfth grade students, grouped according to I. Q., at St. Louis Country Day School, November, 1927.

Type of error	Ninth		Tenth		Eleventh		Twelfth	
	I.Q.		I.Q.		I.Q.		I.Q.	
	110-122	123-137	110-122	123-137	110-122	123-137	110-122	123-137
1. Dependent elements used independently	27	13	7	10	1	2	6	3
2. Faulty connectives	19	9	7	17	5	4	9	1
3. Dangling modifiers	33	19	9	11	10	3	8	1
4. Misplaced modifiers	20	11	11	18	5	3	6	0
5. Omission of pronouns or prepositions	8	6	8	3	2	0	1	0
6. Obscure reference of pronouns	28	20	11	15	12	3	6	0
7. Wrong case of pronouns	36	22	16	18	10	5	13	1
8. Lack of agreement of pro. with antecedents	29	20	5	18	8	1	11	1
9. Lack of agreement of verbs with subjects	13	11	3	8	4	2	5	0
10. Incorrect tense forms	20	7	13	8	7	3	6	1
11. Use of "would" for simple past tense form	0	0	0	0	0	0	0	0
12. Incorrect sequence of tenses	0	0	0	0	0	0	0	0
13. Use of adjectives for adverbs	18	8	9	7	10	3	7	1
14. Confusion forms from sim. of sound or mean.	28	19	22	12	19	5	13	2
15. Double negatives	0	0	0	0	0	0	0	0
16. Unclassified errors	0	0	0	0	0	0	0	0
Totals	279	165	121	147	93	34	91	11
Number students	14	16	13	22	14	11	17	7
Average no. errors	19.9	10.3	9.4	6.7	6.6	3.	5.3	1.6

Table 19

Percentage of errors on various items of Pressey Diagnostic Tests in Grammar and Sentence Structure (Form A), made by ninth, tenth, eleventh, and twelfth grade students, grouped according to I. Q., at St. Louis Country Day School, November, 1927.

Type of errors	Ninth		Tenth		Eleventh		Twelfth	
	I. Q.		I. Q.		I. Q.		I. Q.	
	110-122 123-137		110-122 123-137		110-122 123-137		110-122 123-137	
1. Dependent elements used independently	9.67	7.87	5.78	6.80	1.07	5.88	6.59	27.27
2. Faulty connectives	6.81	5.45	5.78	11.56	5.37	11.76	9.89	9.09
3. Dangling modifiers	11.82	11.51	7.45	7.49	10.75	8.82	8.79	9.09
4. Misplaced modifiers	7.17	6.66	9.09	12.24	5.37	8.82	6.59	0.--
5. Omission of pronouns or prepositions	2.87	3.63	6.61	2.04	2.15	0.--	1.09	0.--
6. Obscure reference of pronouns	10.03	12.12	9.09	10.20	12.90	8.82	6.59	0.--
7. Wrong case of pronouns	12.90	13.33	13.22	12.24	10.75	14.70	14.28	9.09
8. Lack of agreement, pros. with antecs.	10.39	12.12	4.13	12.24	8.59	2.94	12.08	9.09
9. Lack of agreement, verbs with subjs.	4.66	6.66	2.48	5.44	4.30	5.88	5.49	0.--
10. Incorrect tense forms	7.17	4.24	10.74	5.44	7.52	8.82	6.59	9.09
11. Use of "would" for simple past forms	0.--	0.--	0.--	0.--	0.--	0.--	0.--	0.--
12. Incorrect sequence of tenses	0.--	0.--	0.--	0.--	0.--	0.--	0.--	0.--
13. Use of adjectives for adverbs	6.45	4.85	7.45	4.76	10.75	8.82	7.69	9.09
14. Confusion, from similarity sound or mean	10.03	11.51	18.17	9.52	20.43	14.70	14.28	18.18
15. Double negatives	0.--	0.--	0.--	0.--	0.--	0.--	0.--	0.--
16. Unclassified errors	0.--	0.--	0.--	0.--	0.--	0.--	0.--	0.--
Totals	99.97	99.95	99.99	99.97	99.95	99.96	99.95	99.99

Table 20 shows the percentages of certain errors on the Pressey Diagnostic Tests in Grammar and Sentence Structure (Form A) made by students in Country Day School which do not appear in their free writing. Except for grade ten, the percentages are large enough to suggest the need for explanation.

Table 20

Percentage of certain errors on Pressey Diagnostic Tests of Grammar and Sentence Structure (Form A), made by students in Country Day School, which do not appear in their free writing.

Grade	I. Q.	Percentage of errors* not appearing in free writing
9	110-122	19.35
	123-137	25.05
10	110-122	12.90
	123-137	5.66
11	110-122	12.90
	123-137	36.04
12	110-122	41.74
	123-137	54.54

* Items in table 20 include: Dependent elements used independently, dangling modifiers, omission of pronouns or prepositions, wrong case of pronouns, lack of agreement of pronouns and antecedents, lack of agreement of verbs with subjects, incorrect tense forms, use of "would" for simple past tense forms, use of adjectives for adverbs, and double negatives.

The percentages of certain errors appearing in the free writing of Country Day School students, and of University of Kansas freshmen and upper-classmen, which are not covered by the Pressey tests are presented in Table 21. The percentages for students of I. Q. 122-137 are somewhat higher than for those of I. Q. 110-122, with the exception of pupils in grade eleven. For the superior students (I. Q. 123-137) the percentages of errors made but not covered by the Pressey tests increase with advancement in school classification.

Table 21

Percentages of certain structural and grammatical errors appearing in the free writing of Country Day School students and of students at the University of Kansas which are not covered by Pressey Diagnostic Tests in Grammar and Sentence Structure.

Grade	I. Q.	Percentage of errors* not covered by Pressey tests
9	110-122	14.73
	123-137	18.00
10	110-122	15.60
	123-137	17.27
11	110-122	28.21
	123-137	27.77
12	110-122	20.36
	123-137	38.03
University freshmen		20.87
University juniors and seniors		18.45

*Errors in Table one percentages include: Use of "would" for simple past tense forms, incorrect sequence of tenses, double negatives, unclassified errors.

Table 22 shows the number of errors per hundred words made (a) by students in grades nine, ten, eleven, and twelve, in Country Day School, (b) by freshmen at University of Kansas, and (c) by juniors and seniors at the University of Kansas. Those students of I. Q. 122-137 in grade nine make less than half the number of errors per hundred words that do students of I. Q. 110-122 in the same grade. There is practically no difference between the numbers of errors made by the two groups in grade twelve, nor between the numbers made by university freshmen and university upperclassmen.

Table 22

Grade	I. Q.	Number of errors per hundred words
9	110-122	2.0
	123-137	.9
10	110-122	1.8
	123-137	1.3
11	110-122	1.7
	123-137	.4
12	110-122	1.0
	123-137	1.0
University freshmen		2.23
University juniors and seniors		2.07

V. Conclusions

A. Types of Errors in Free Writing.

1. Types of errors predominating in the free writing of the three groups studied are (a) faulty connectives, (b) obscure reference of pronouns, and (c) misplaced modifiers. Faulty connectives and obscure reference of pronouns comprise from 34% to 44% of the errors made by the superior students in grades nine to twelve, and from 32% to 40% of those made by the university freshmen and upperclassmen.

2. There is no marked variation from year to year in the relative frequency of appearance of types of errors in the writing of the college or the Country Day School students.

3. The percentage of unclassified errors for superior students (I. Q. 110-137) is markedly higher than for unselected University of Kansas students. Unclassified errors for very superior students (I. Q. 122-137) comprise from 11% to 22% of all errors made; for the college students, from 4.2% to 4.8%.

4. The university students make frequent use of "would" for simple past tense, while this usage rarely appears in the writing of the superior students.

5. Certain errors rarely appear in the free writing of either University of Kansas students or Country Day School pupils:

1. Double negatives.
2. Use of adjectives for adverbs.
3. Wrong case of pronouns.
4. Omission of pronouns or prepositions.

6. Unselected university freshmen and upperclassmen make practically the same number of structural and grammatical errors in written composition as do ninth grade students of I. Q. 110-122, and twice as many as do twelfth grade students of I. Q. 123-137, if those whose writing is here studied may be considered typical.

7. Upperclassmen in college write with a degree of correctness only slightly greater than do college freshmen, if those whose writing is here considered are representative.

B. Adequacy of Pressey Tests in Composition as a Means of Diagnosing Errors of Superior Students.

1. Pressey Diagnostic Tests in Composition, Part C (grammar) and Part D (sentence structure) do not adequately diagnose the writing difficulties of the students of superior mental ability in grades nine to twelve, inclusive. Errors not covered by the Pressey tests comprise from 14% to 38% of all errors made by these students. The fact that this percentage increases with advancement of grade classification indicates that the Pressey tests are more nearly adequate for diagnostic purposes in grades nine and ten than in grades eleven and twelve, if the Country Day School students studied may be considered typical.

2. There is a marked lack of correspondence between the types of errors made by students of superior mental ability on free writing, and the types of errors they make on the diagnostic tests. This may be due to the failure of the students to employ in their free writing the constructions and usages on which they make errors in the Pressey tests. On the other hand, it is possible that, because of the superior homes from which most of the Country Day School pupils come, they have formed habits of correct speech and writing but have not learned to detect the fault in an incorrect construction.

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OTIS SELF-ADMINISTERING TESTS OF MENTAL ABILITY

By ARTHUR S. OTIS

Formerly Development Specialist with Advisory Board, General Staff, United States War Department

HIGHER EXAMINATION: FORM A

20

For High Schools and Colleges

Score.....

Read this page. Do what it tells you to do.

Do not open this paper, or turn it over, until you are told to do so. Fill these blanks, giving your name, age, birthday, etc. Write plainly.

Name.....Age last birthday.....years
First name, initial, and last name

Birthday.....Class.....Date.....192...
Month Day

School or College.....City.....

This is a test to see how well you can think. It contains questions of different kinds. Here is a sample question already answered correctly. Notice how the question is answered:

Which one of the five words below tells what an apple is?

1 flower, 2 tree, 3 vegetable, 4 fruit, 5 animal.....(4)

The right answer, of course, is "fruit"; so the word "fruit" is underlined. And the word "fruit" is No. 4; so a figure 4 is placed in the parentheses at the end of the dotted line. This is the way you are to answer the questions.

Try this sample question yourself. Do not write the answer; just draw a line under it and then put its number in the parentheses:

Which one of the five words below means the opposite of north?

1 pole, 2 equator, 3 south, 4 east, 5 west.....()

The answer, of course, is "south"; so you should have drawn a line under the word "south" and put a figure 3 in the parentheses. Try this one:

A foot is to a man and a paw is to a cat the same as a hoof is to a — what?

1 dog, 2 horse, 3 shoe, 4 blacksmith, 5 saddle.....()

The answer, of course, is "horse"; so you should have drawn a line under the word "horse" and put a figure 2 in the parentheses. Try this one:

At four cents each, how many cents will 6 pencils cost?.....()

The answer, of course, is 24, and there is nothing to underline; so just put the 24 in the parentheses. If the answer to any question is a number or a letter, put the number or letter in the parentheses without underlining anything. Make all letters like printed capitals.

The test contains 75 questions. You are not expected to be able to answer all of them, but do the best you can. You will be allowed half an hour after the examiner tells you to begin. Try to get as many right as possible. Be careful not to go so fast that you make mistakes. Do not spend too much time on any one question. No questions about the test will be answered by the examiner after the test begins. Lay your pencil down.

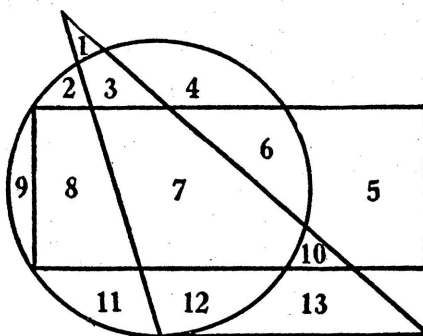
Do not turn this page until you are told to begin.

EXAMINATION BEGINS HERE:

1. The opposite of hate is (?)
1 enemy, 2 fear, 3 love, 4 friend, 5 joy..... ()
2. If 3 pencils cost 5 cents, how many pencils can be bought for 50 cents?..... ()
3. A bird does not always have (?)
1 wings, 2 eyes, 3 feet, 4 a nest, 5 a bill..... ()
4. The opposite of honor is (?)
1 glory, 2 disgrace, 3 cowardice, 4 fear, 5 defeat..... ()
5. A fox most resembles a (?)
1 wolf, 2 goat, 3 pig, 4 tiger, 5 cat..... ()
6. Quiet is related to sound in the same way that darkness is related to (?)
1 a cellar, 2 sunlight, 3 noise, 4 stillness, 5 loud..... ()
7. A party consisted of a man and his wife, his two sons and their wives, and four children in each son's family. How many were there in the party?..... ()
8. A tree always has (?)
1 leaves, 2 fruit, 3 buds, 4 roots, 5 a shadow..... ()
9. The opposite of economical is (?)
1 cheap, 2 stingy, 3 extravagant, 4 value, 5 rich..... ()
10. Silver is more costly than iron because it is (?)
1 heavier, 2 scarcer, 3 whiter, 4 harder, 5 prettier..... ()
11. Which one of the six statements below tells the meaning of the following proverb? "The early bird catches the worm."..... ()
 1. Don't do the impossible.
 2. Weeping is bad for the eyes.
 3. Don't worry over troubles before they come.
 4. Early birds like worms best.
 5. Prompt persons often secure advantages over tardy ones.
 6. It is foolish to fret about things we can't help.
12. Which statement above tells the meaning of this proverb? "Don't cry over spilt milk.".... ()
13. Which statement above explains this proverb? "Don't cross a bridge till you get to it.".... ()
14. An electric light is related to a candle as an automobile is to (?)
1 a carriage, 2 electricity, 3 a tire, 4 speed, 5 glow..... ()
15. If a boy can run at the rate of 6 feet in $\frac{1}{4}$ of a second, how many feet can he run in 10 seconds? ()
16. A meal always involves (?)
1 a table, 2 dishes, 3 hunger, 4 food, 5 water..... ()
17. Of the five words below, four are alike in a certain way. Which is the one not like these four?
1 bend, 2 shave, 3 chop, 4 whittle, 5 shear..... ()
18. The opposite of never is (?)
1 often, 2 sometimes, 3 occasionally, 4 always, 5 frequently..... ()
19. A clock is related to time as a thermometer is to (?).
1 a watch, 2 warm, 3 a bulb, 4 mercury, 5 temperature..... ()
20. Which word makes the truest sentence? Men are (?) shorter than their wives.
1 always, 2 usually, 3 much, 4 rarely, 5 never..... ()
21. One number is wrong in the following series. What should that number be?
1 4 2 5 3 6 4 7 5 9 6 9..... ()
22. If the first two statements following are true, the third is (?) All members of this club are Republicans. Smith is not a Republican. Smith is a member of this club.
1 true, 2 false, 3 not certain..... ()
23. A contest always has (?)
1 an umpire, 2 opponents, 3 spectators, 4 applause, 5 victory..... ()
24. Which number in this series appears a second time nearest the beginning?
6 4 5 3 7 8 0 9 5 9 8 8 6 5 4 7 3 0 8 9 1..... ()
25. The moon is related to the earth as the earth is to (?)
1 Mars, 2 the sun, 3 clouds, 4 stars, 5 the universe..... ()
26. Which word makes the truest sentence? Fathers are (?) wiser than their sons.
1 always, 2 usually, 3 much, 4 rarely, 5 never..... ()

27. The opposite of awkward is (?)
1 strong, 2 pretty, 3 short, 4 graceful, 5 swift. ()
28. A mother is always (?) than her daughter.
1 wiser, 2 taller, 3 stouter, 4 older, 5 more wrinkled. ()
29. Which one of the six statements below tells the meaning of the following proverb? "The burnt child dreads the fire." ()
1. Frivolity flourishes when authority is absent.
 2. Unhappy experiences teach us to be careful.
 3. A thing must be tried before we know its value.
 4. A meal is judged by the dessert.
 5. Small animals never play in the presence of large ones.
 6. Children suffer more from heat than grown people.
30. Which statement above explains this proverb? "When the cat is away, the mice will play." ()
31. Which statement above explains this proverb? "The proof of the pudding is in the eating." ()
32. If the settlement of a difference is made by mutual concession, it is called a (?)
1 promise, 2 compromise, 3 injunction, 4 coercion, 5 restoration. ()
33. What is related to disease as carefulness is to accident?
1 doctor, 2 surgery, 3 medicine, 4 hospital, 5 sanitation. ()
34. Of the five things below, four are alike in a certain way. Which is the one not like these four?
1 smuggle, 2 steal, 3 bribe, 4 cheat, 5 sell. ()
35. If 10 boxes full of apples weigh 400 pounds, and each box when empty weighs 4 pounds, how many pounds do all the apples weigh? ()
36. The opposite of hope is (?)
1 faith, 2 misery, 3 sorrow, 4 despair, 5 hate. ()
37. If all the odd-numbered letters in the alphabet were crossed out, what would be the tenth letter not crossed out? Print it. *Do not mark the alphabet.*
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z. ()
38. What letter in the word SUPERFLUOUS is the same number in the word (counting from the beginning) as it is in the alphabet? Print it. ()
39. What people say about a person constitutes his (?)
1 character, 2 gossip, 3 reputation, 4 disposition, 5 personality. ()
40. If $2\frac{1}{2}$ yards of cloth cost 30 cents, how many cents will 10 yards cost? ()
41. If the words below were arranged to make a good sentence, with what letter would the second word of the sentence begin? Make it like a printed capital.
same means big large the as. ()
42. If the first two statements following are true, the third is (?) George is older than Frank. James is older than George. Frank is younger than James.
1 true, 2 false, 3 not certain. ()
43. Suppose the first and second letters in the word CONSTITUTIONAL were interchanged, also the third and fourth letters, the fifth and sixth, etc. Print the letter that would then be the twelfth letter counting to the right. ()
44. One number is wrong in the following series. What should that number be?
0 1 3 6 10 15 21 28 34. ()
45. If $4\frac{1}{2}$ yards of cloth cost 90 cents, how many cents will $2\frac{1}{2}$ yards cost? ()
46. A man's influence in a community should depend upon his (?)
1 wealth, 2 dignity, 3 wisdom, 4 ambition, 5 political power. ()
47. What is related to few as ordinary is to exceptional?
1 none, 2 some, 3 many, 4 less, 5 more. ()
48. The opposite of treacherous is (?)
1 friendly, 2 brave, 3 wise, 4 cowardly, 5 loyal. ()
49. Which one of the five words below is most unlike the other four?
1 good, 2 large, 3 red, 4 walk, 5 thick. ()
50. If the first two statements following are true, the third is (?) Some of Brown's friends are Baptists. Some of Brown's friends are dentists. Some of Brown's friends are Baptist dentists.
1 true, 2 false, 3 not certain. ()
51. How many of the following words can be made from the letters in the word LARGEST, using any letter any number of times?
great, stagger, grasses, trestle, struggle, rattle, garage, strangle. ()
52. The statement that the moon is made of green cheese is (?)
1 absurd, 2 misleading, 3 improbable, 4 unfair, 5 wicked. ()

53. Of the five things following, four are alike in a certain way. Which is the one not like these four?
1 tar, 2 snow, 3 soot, 4 ebony, 5 coal..... ()
54. What is related to a cube in the same way in which a circle is related to a square?
1 circumference, 2 sphere, 3 corners, 4 solid, 5 thickness..... ()
55. If the following words were seen on a wall by looking in a mirror on an opposite wall, which word would appear exactly the same as if seen directly?
1 OHIO, 2 SAW, 3 NOON, 4 MOTOR, 5 OTTO..... ()
56. If a strip of cloth 24 inches long will shrink to 22 inches when washed, how many inches long will a 36-inch strip be after shrinking?..... ()
57. Which of the following is a trait of character?
1 personality, 2 esteem, 3 love, 4 generosity, 5 health..... ()
58. Find the two letters in the word DOING which have just as many letters between them in the word as in the alphabet. Print the one of these letters that comes first in the alphabet.
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z..... ()
59. Revolution is related to evolution as flying is to (?)
1 birds, 2 whirling, 3 walking, 4 wings, 5 standing..... ()
60. One number is wrong in the following series. What should that number be?
1 3 9 27 81 108..... ()
61. If Frank can ride a bicycle 30 feet while George runs 20 feet, how many feet can Frank ride while George runs 30 feet?..... ()
62. Count each N in this series that is followed by an O next to it if the O is not followed by a T next to it. Tell how many N's you count.
N O N T Q M N O T M O N O O N Q M N N O Q N O T O N A M O N O M..... ()
63. A man who is averse to change and progress is said to be (?)
1 democratic, 2 radical, 3 conservative, 4 anarchistic, 5 liberal..... ()
64. Print the letter which is the fourth letter to the left of the letter which is midway between O and S in the alphabet..... ()
65. What number is in the space which is in the rectangle and in the triangle but not in the circle? ()



66. What number is in the same geometrical figure or figures as the number 8?..... ()
67. How many spaces are there that are in any two but only two geometrical figures?..... ()
68. A surface is related to a line as a line is to (?)
1 solid, 2 plane, 3 curve, 4 point, 5 string..... ()
69. If the first two statements following are true, the third is (?) One cannot become a good violinist without much practice. Charles practices much on the violin. Charles will become a good violinist.
1 true, 2 false, 3 not certain..... ()
70. If the words below were arranged to make the best sentence, with what letter would the last word of the sentence end? Print the letter as a capital.
sincerity traits courtesy character of desirable and are..... ()
71. A man who is influenced in making a decision by preconceived opinions is said to be (?)
1 influential, 2 prejudiced, 3 hypocritical, 4 decisive, 5 impartial..... ()
72. A hotel serves a mixture of 2 parts cream and 3 parts milk. How many pints of cream will it take to make 15 pints of the mixture?..... ()
73. What is related to blood as physics is to motion?
1 temperature, 2 veins, 3 body, 4 physiology, 5 geography..... ()
74. A statement the meaning of which is not definite is said to be (?)
1 erroneous, 2 doubtful, 3 ambiguous, 4 distorted, 5 hypothetical..... ()
75. If a wire 20 inches long is to be cut so that one piece is $\frac{3}{5}$ as long as the other piece, how many inches long must the shorter piece be?..... ()

DIAGNOSTIC TESTS IN ENGLISH COMPOSITION:
(C) GRAMMAR

Name..... Age.....

Grade or Class..... School.....

City..... State..... Date.....

Directions—Read Carefully!

Notice the four statements below:

- ☐ They were here.
- ☒ We was going.
- ☐ Where were you yesterday?
- ☐ It was time to go.

One of these four sentences—"We was going"—contains something which is not good English; the sentence should read "We were going." A cross has been put before this sentence, to show that it is wrong.

On the following pages there are some more groups of four sentences. And in each group one sentence, and only one, is incorrect—contains something which is not good English. You are to find the wrong sentence in each group and put a cross in the square before it, just as there is a cross before "We was going" in the group above. If you are not certain which sentence is incorrect mark the one which seems to you least satisfactory; be sure to mark one, and only one, sentence in every group. Remember also to mark in the square; do not put a cross half way between two sentences. Any doubtful marks will be counted against you.

As soon as you are told to do so, open the blank and begin at once. Be sure you finish all three pages; do not stop at the bottom of the first or second pages. Work rapidly.

DO NOT OPEN THE BLANK UNTIL YOU ARE TOLD TO DO SO. AS SOON AS THE WORD IS GIVEN BEGIN AT ONCE!

Devised by F. R. Conkling
and S. L. Presssey

Department of Psychology
The Ohio State University

1. ☐ Were you notified of the change?
☐ Why doesn't that letter come?
☐ It don't seem possible.
☐ Smith was here yesterday.
2. ☐ Swimming, boating, and fishing is great fun.
☐ A Ford is economical because first cost and up-keep are low.
☐ How are Mrs. Smith and Dorothy?
☐ Physics or botany is required for graduation.
3. ☐ There is no excuse for these delays.
☐ There is too many people in this room.
☐ Along the bank there were large trees.
☐ Between Fanny and Helen there have been no secrets.
4. ☐ Immigrants who have no money are not allowed to enter.
☐ All pupils who failed this examination are to do extra work.
☐ Coal which dealers ordered months ago is not yet delivered.
☐ Things that Ruth thought essential for her comfort was lacking.
5. ☐ Lee, with all his soldiers, was forced to surrender.
☐ Tom and Dick were here.
☐ The proprietor, together with all his clerks, was arrested.
☐ Several bystanders, as well as the thief, was injured.
6. ☐ The bright colors of the picture appeal to him.
☐ The first one of the runners was just rounding the bend.
☐ The box of pens have disappeared.
☐ The consumption of soft drinks is steadily increasing.
7. ☐ Will someone lend me his pencil?
☐ Everybody did their best.
☐ Each girl must have her own work to do.
☐ All the girls want their report cards returned.
8. ☐ Either of the candidates will make themselves popular with the voters.
☐ Neither Fred nor John knew his lesson.
☐ Both John and Henry have their cars here.
☐ No boy or girl should be disrespectful to his or her parents.
9. ☐ No one cares to be so peculiar that people laugh at him.
☐ Many people in the audience said that they could not hear the speaker.
☐ If anybody makes a motion to resist, arrest him at once.
☐ If one tries they can succeed.
10. ☐ A fireman must be brave, for he is often in great danger.
☐ The student becomes nervous, and as a result he fails.
☐ If a person cannot swim they should not go out in a canoe.
☐ If boys once begin smoking it is hard to break them of the habit.

Do not stop; GO ON TO THE NEXT PAGE!

11. ☐ The time seemed to pass very swiftly.
☐ She folded, sealed, and mailed the letter.
☐ He ask me the way to the station.
☐ We have used that sewing machine for years.
12. ☐ He almost drowned while trying to swim across the river.
☐ John clumb the tree to the limb where the kitten was.
☐ The police dragged the river for the body.
☐ At recess we attacked the snow fort.
13. ☐ I saw Harold at school this morning.
☐ Mary did all the things that you wished to have done.
☐ Arthur came over to see you yesterday.
☐ He run until he was out of breath.
14. ☐ Our heater bursted and flooded the cellar.
☐ She heard all that you said.
☐ The path led to the top of the hill.
☐ The corn grew fast during the hot spell.
15. ☐ He had drunk all the lemonade.
☐ Mother has given Harry a watch for his birthday.
☐ Helen was borned on Christmas day.
☐ I have never ridden over worse roads.
16. ☐ You should have seen the fireworks yesterday.
☐ He might of been injured severely.
☐ He ought to have gone home with you.
☐ He must have gone by another road.
17. ☐ I set the basket there last night.
☐ She sat down in the big chair.
☐ Mother likes to sit by the window and read.
☐ He had set down in another man's seat.
18. ☐ Mother lay down on the couch to rest.
☐ Mary has laid here, resting, since dinner.
☐ Tom laid his book on the wet table.
☐ Lie down on the bed while you are waiting for the doctor.
19. ☐ You may leave the book on the table.
☐ The sick girl left the class.
☐ The teacher let me go early.
☐ The police left the thief escape.
20. ☐ John asked if he might go home.
☐ Can you speak French?
☐ Can I go if I will promise to return early?
☐ May I go fishing this afternoon?

Do not stop; GO ON TO THE NEXT PAGE!

21. ☐ There is the man whom you wished to see.
☐ There home is not far from here.
☐ They're planning to spend this winter in Florida.
☐ There's the car the Smiths thought was theirs.
22. ☐ Two of our friends are going with us.
☐ We hope to hear from you soon regarding this bill.
☐ Helen takes everything to seriously.
☐ Return the book to me when you finish reading it.
23. ☐ It will be an hour before we can go.
☐ John's hat and coat are new.
☐ An old man fell on the slippery pavement.
☐ Mary has a pencil and a apple on her desk.
24. ☐ She is very good to her mother.
☐ All things considered, she did well.
☐ I can swim as good as John.
☐ He had a cold, but is now well again.
25. ☐ He looked quickly about the room.
☐ She is very careful and exact.
☐ The leader looked very imposing.
☐ He spoke very distinct.
26. ☐ The work was done miserably poorly.
☐ Was he injured very serious?
☐ That canned fish tastes bad.
☐ That statement is surely wrong.
27. ☐ Whom did they say was hurt?
☐ Whom did they suspect?
☐ Who do you suppose it was?
☐ Whom did they take him to be?
28. ☐ Father sent Walter and I to the store.
☐ Both Arthur and I went.
☐ They asked either John or me to go.
☐ It was he who knocked.
29. ☐ Does that apply to us girls?
☐ We mothers are all coming.
☐ He found us girls at the candy store.
☐ They asked we boys to help them.
30. ☐ All the family will be there except you and me.
☐ I am as much to blame as he.
☐ The stranger sat down between Mary and I.
☒ I like him better than her.

When you have finished, GO BACK OVER YOUR WORK TO BE SURE
YOU HAVE MADE NO MISTAKES!

DIAGNOSTIC TESTS IN ENGLISH COMPOSITION:
(D) SENTENCE STRUCTURE

Name..... Age.....

Grade..... School.....

City or town..... State..... Date.....

Directions—Read Carefully!

Notice the four statements below:

- ☐ He finished school last June. Since that time he has done nothing.
- ☐ We spent the afternoon in the park; it is very pleasant there:
- ☒ John had a position in a store. Which he left.
- ☐ He found a dollar bill which some one had dropped in the aisle.

One of the four—"John had a position in a store. Which he left"—includes something which is not a good sentence. A cross has been put before this line, to show that it is wrong.

On the following pages there are other groups, each of four statements. And in each group one statement is not well expressed—has in it something which is not a good sentence. You are to find the wrong line in each group and put a cross in the square before it, just as there is a cross before "John had a position in a store. Which he left" in the group above. If you are not certain which line has the poor sentence, mark the one which seems to you least satisfactory; be sure to mark one, and only one, statement in every group. Remember also to mark in the square; do not put any cross half way between two lines. Any doubtful marks will be counted against you.

As soon as you are told to do so, turn to the next page and begin at once. Be sure you finish all three pages; do not stop at the bottom of the first or second page. Work rapidly.

DO NOT OPEN THE BLANK UNTIL YOU ARE TOLD TO DO SO. AS SOON AS THE WORD IS GIVEN BEGIN AT ONCE!

1. ☐ His favorite sports are swimming and fishing.
☐ He had two pets. A dog and a cat.
☐ He has failed in two subjects, geography and history.
☐ She broke two dishes. One was a cup, the other a plate.
2. ☐ He was fortunate in having a good teacher.
☐ She was much frightened. Something was stirring in the bushes.
☐ We were startled. By having a tire blow out.
☐ Some days he works hard, while on other days he does nothing.
3. ☐ While in New York she spent most of her time shopping.
☐ He was a very short man, hardly more than five feet tall.
☐ When he did answer he could not be understood.
☐ When a mere child, she was certainly no more than ten.
4. ☐ The invention of the telephone, which made communication easy.
☐ The discovery of America changed the history of the world.
☐ He was very persistent; this brought him success.
☐ Carnegie, who died recently, was a great public benefactor.
5. ☐ On the way home Mary and I stopped to see Mrs. Smith, my former music teacher, who lives in a queer old house near the village.
☐ There is a deep pool in the river near our camp; last summer my brother tried to swim across the pool, and was nearly drowned.
☐ I ran upstairs to see what was the matter. Just then Bob rushed out of the room and knocked me down.
☐ In falling I grabbed Tom my cousin, who was there, and he fell too, and being heavy broke the chair, and it was an heirloom of mother's.
6. ☐ Our car broke down, and left us stranded in the country.
☐ The lights went out and the play began.
☐ Tom lives near me and last night his house burned.
☐ In Jane's desk, which is near mine, some candy was hidden.
7. ☐ Your letter came today, it was good to hear from you.
☐ The storm was severe; all trains were delayed.
☐ John returned today. We were certainly glad to see him.
☐ We are much pleased to have your order, which reached us today.
8. ☐ Knowing the play would be interesting, I bought a ticket.
☐ James came over and so we decided to go, and so started.
☐ Since Harry was ill we returned home, and called a doctor.
☐ The day was clear; accordingly we bought a lunch, and started.

Do not stop; GO ON TO THE NEXT PAGE!

9. ☐ She still has a fear of water, although she has tried to overcome it.
☐ This old fisherman supplies fish to all the restaurants.
☐ I like doctors, and so chose it as my profession.
☐ Your milkman supplies us also.
10. ☐ The mad dog bit the horse and caused its death.
☐ She failed to see a doctor last week; this neglect she now regrets.
☐ He disturbed the wasps, which became angry and stung him.
☐ At camp the boys become acquainted, which often grow into friendships.
11. ☐ Here is our new house, which we like very much.
☐ This is Carter's old home, who was born here in 1890.
☐ This book belonged to my grandfather, who was a doctor.
☐ History was Henry's favorite subject; he neglected his other work.
12. ☐ As John went past his room he spoke to him.
☐ Henry spoke to the old man, and was very kind to him.
☐ Jim followed the boy up-town, and saw him enter the drug store.
☐ When Mary called to see Helen she found that the poor girl was crying.
13. ☐ When he fired the gun he frightened the horse.
☐ Coming over the hill one sees the chapel tower.
☐ Half hidden among the trees, the house was not easily found.
☐ Reaching out for the paddle, the canoe turned over.
14. ☐ As I came out of the house a fire engine passed.
☐ Having taken our seats the usher gave us programs.
☐ Having paid the bill we gave our bags to the porter.
☐ The work being completed, the foreman paid off the men.
15. ☐ He is ill as a result of the accident.
☐ His wealth is due to his hard work.
☐ He is still weak, caused by influenza.
☐ His expulsion was caused by his thieving.
16. ☐ While still weak from his illness he insisted upon working.
☐ When six years old his father died.
☐ When we were children our parents seemed very old.
☐ While we were eating our lunch the train started.

Do not stop; GO ON TO THE NEXT PAGE!

17. ☐ His hands, which are long and thin, are always in motion.
☐ The boat, held by a single cable, swung out into the stream.
☐ The boy was always laughing, and was noted for his wit.
☐ Her eyes sparkle continuously, separated by a short little nose.
18. ☐ A man in overalls rushed out and stopped the horse.
☐ He saw the train rolling slowly out of the station.
☐ Standing on this bridge one may see many boats.
☐ Nearby sat a man playing poker with a red necktie.
19. ☐ The natives obtained their food from the river which was fish.
☐ He turned and ran when the policeman appeared.
☐ He dropped in the mud the book which he was carrying.
☐ The dishes which we ordered came in a wooden box.
20. ☐ The jeweler not only repaired the watch, but also cleaned it.
☐ He has decided to buy either a closed car or a roadster.
☐ She not only cleaned the kitchen, but also the parlor.
☐ He discussed the matter with both Jones and Smith.
21. ☐ Do you know where that man is at?
☐ Take that book off the table!
☐ While in Chicago he met an old friend.
☐ Where is John going?
22. ☐ The boy who broke the window was arrested.
☐ My father he fell and sprained his ankle.
☐ Then the thief turned and ran.
☐ For a moment I could hardly think what to say.
23. ☐ When I was younger I was very fond of swimming.
☐ This is the store which was robbed last night.
☐ Smith, when a boy, was always in mischief.
☐ He was a student was very careless about his work.
24. ☐ The finish of this car is superior to that of any other car made.
☐ Noises can be heard through this wall as well as through a door.
☐ Hers was a voice which audiences were certain to be captivated.
☐ On one crossing the engine stalled.

GO BACK OVER YOUR WORK TO BE CERTAIN YOU
HAVE MADE NO MISTAKES.